

CLAIMS

1. A device for through-cutting of an extruded ice mass which is extruded out of a nozzle, comprising cutting means which immediately after the nozzle cuts up the
5 extruded ice mass into product pieces which fall down on a receiving device for further processing,
characterised in that
the cutting means comprises
a first knife, which is reciprocally arranged in a transverse first, plane
10 immediately after the outlet of the nozzle and arranged with a first stroke length,
a second knife which is reciprocally arranged in a plane which is parallel to the first plane and which is arranged immediately below the first knife with respect to the flow direction out of the nozzle, the second knife is arranged with a second stroke length which is smaller than the first stroke length, and
15 means for simultaneous reciprocation of the first and the second knife.
2. A device according to claim 1, comprising means for control of the movements of the knives, securing that the first knife is guided in a first transverse stroke which consists in a complete through-cutting of the ice mass, and that the second knife in a
20 simultaneously movement is guided partly through the ice mass in an oppositely directed stroke of which the direction of movement is opposite the direction of movement of the first stroke.
3. A device according to claim 1 or 2 in which the second stroke length of the second
25 knife is half of the first stroke length.
4. A device according to claim 1 to 3 in which the first knife and the second knife are arranged in parallel guides in a frame in the means of control with opposing inactive positions arranged on each side of the ice mass which is extruded from the nozzle.

5. A device according to claim 4, in which the first and the second knife are eccentric connected to rotor means which by coupling means are attached to rotating drive means, whereby a rotational movement from the drive means is transferred to the rotor means and is transformed into a translational movement of the knives.

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6. A device according to claim 5, wherein the coupling means comprise a pneumatic or electric activatable coupling and the control means comprise means for engaging the coupling for performing a through-cutting in dependency of the flow velocity of the ice mass out of the nozzle.

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7. A method for through-cutting of an extruded ice mass which is extruded out of a nozzle, comprising cutting means which immediately after the nozzle cuts up the extruded ice mass into product pieces which fall down on a receiving device for further processing, in which a first knife is reciprocally arranged in a transverse first plane immediately after the outlet of the nozzle and a second knife is reciprocally arranged in a plane which is parallel to the first plane and which is arranged immediately below the first knife with respect to the flow direction out of the nozzle, and in which the first knife is guided in a first transverse stroke which consists of a complete through-cutting of the ice mass, and that the second knife in a simultaneously movement is guided partly through the ice mass in an oppositely directed stroke in which the direction of movement is opposite the direction of movement of the first stroke.

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8. A method according to claim 7, in which the ice mass is continuously extruded out of the nozzle.

9. A method according to claim 7 or 8, in which the second stroke length of the second knife is half of the first stroke length of the first knife.

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10. A method according to claim 7 to 9, in which the simultaneous, oppositely directed strokes of the first and the second knife are activated by engaging rotor

means to which the knives are eccentrically connected, whereby a rotational movement from drive means is transferred to the rotor means and is transformed into a translational movement of the knives.

- 5 11. A method according to claim 10, in which the coupling means comprise a pneumatic activatable coupling and the control means comprise an electric and/or pneumatic control for engaging the coupling for performing a through-cutting in dependency of the flow velocity of the ice mass out of the nozzle.

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